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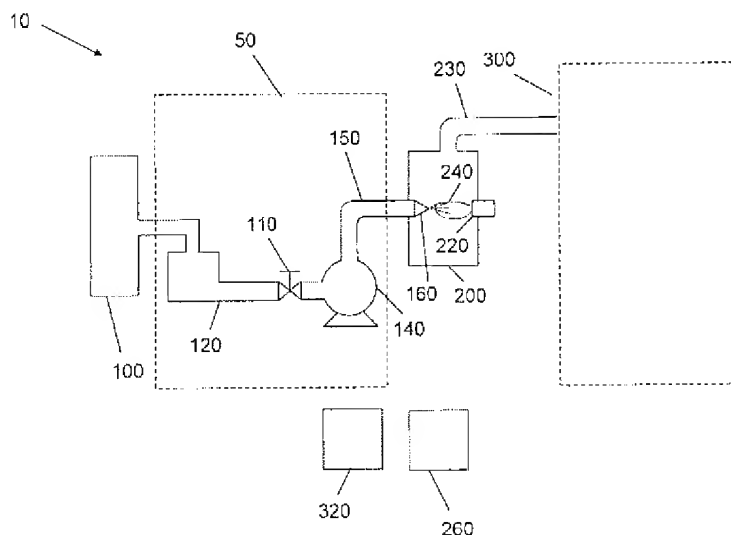
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(54) Title: **METHOD AND SYSTEM FOR TREATING CHEMICAL WASTE**



(57) Abstract: The invention is a system and method for neutralizing fluid chemical waste products that result from a chemical production process and are collected from the production line. The invention comprises a pyrolysis/reaction chamber (200) into which the fluid chemical waste is pumped (140) through an atomizer (160). The jet of small droplets of liquid waste that is formed by the atomizer (160) effectively contacts the plasma stream created by a plasma torch (220). When the droplets contact the plasma stream the molecules of the waste from which the droplets are composed are dissociated into atoms and/or ions. These atoms and ions move out of the immediate region of the plasma stream and recombine to form a mixture of product gases which exits the chamber. The product gases then enter a post-pyrolysis subsystem (300), which is designed to neutralize and/or collect the components comprising the mixture of product gases.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IL2005/000385

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 B01J19/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A62D B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.          |
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| -/--       |   |                                |

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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